

REMARKS

There is no indication that the originally filed formal drawings have been approved. Applicants respectfully request an indication that the drawings are approved in the next Office Action.

The rejection of Claims 1 and 2 under 35 USC §102(b) as being anticipated by Kohler, U.S. Patent No. 4 361 331 has been considered.

Kohler discloses a seal for vacuum flange connections. Figures 1a-1d of Kohler shows a support ring 4 with centering extensions 6 on an inside part of the support ring. Separate seal rings 5 are supported by grooves 7, 8 in the support ring 4 to provide a seal between flange surfaces. The seal rings 5 have a circular cross-section.

In the embodiment illustrated in Figures 2a-2d of Kohler, the centering extensions 6 are on an outside part of the support ring 4. The seal rings 5 are supported by the support rings as shown in Figure 2c to provide the proper sealing effect.

Applicants' Claim 1 is directed to the embodiment illustrated in Applicants' Figures 1-4. Claim 1 recites a ring-shaped metal gasket comprising an "annular main body", "a pair of annular arm portions projecting circumferentially outwardly of the annular main body in a bugle state at a predetermined angle", and "an annular projecting portion bulging circumferentially inwardly of the annular main body with a height larger than the axial height of the annular main body".

Claim 1 further recites that "the pair of annular arm portions are disposed in a flange and seal the flange by elastically deforming when each said arm portion contacts a flange face with an elastic rebound force as a result of clamping the flange".

The Claim 1 arrangement differs from Kohler, which utilizes a separate seal ring 5 for contacting the flanges. The support ring of Kohler, does not contact the flanges to

form a seal, but merely receives the seal rings 5 in respective grooves 7, 8. The seal rings 5, which have a circular cross-section, provide the sealing effect. Thus Kohler does not disclose or suggest annular arm portions that seal the flange.

Applicants' independent Claim 2 is directed to the embodiment in Applicants' Figures 5 and 6 wherein the annular arm portions 2 project circumferentially inwardly of the annular main body. Claim 2 also recites that "the pair of annular arm portions are disposed in a flange and seal the flange by elastically deforming when each said arm portion contacts a flange face with an elastic rebound force as a result of clamping of the flange". As discussed above, in Kohler the seal rings 5 provide a sealing effect and the support ring 4 functions to support the seal rings. Therefore, Applicants' Claim 2 distinguishes Kohler.

Added dependent Claims 3-6 further distinguish the applied prior art. Claims 3 and 4 recite that "said metal gasket is free from additional sealing elements and said gasket comprises a monolithic element". These features further distinguish Kohler, which relies on the separate seal rings 5 in combination with the support ring 4.

Applicants' dependent Claims 5 and 6 recite that the predetermined angle is "within a range of 10 degrees to 15 degrees relative to a plane defined by the circumference of said main body". This specific range of angles is not believed present in Kohler.

Added Claims 7-12 further distinguish Kohler. Independent Claim 7 corresponds to the embodiment illustrated in Applicants' Figures 5 and 6. Claim 7 recites a ring-shaped metal gasket including "a pair of annular arm portions projecting generally inwardly from the inner side of the annular main body" at a predetermined angle and "each of the angular arm portions projecting inwardly having a substantially rectangular cross section so that the annular arm portions have substantially the same width along the

length thereof". This structure differs from Figure 2d of Kohler which shows tips of narrowing width for the portions projecting inwardly.

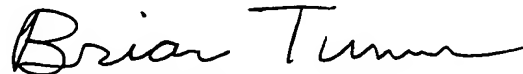
Claims 8-11 further distinguish Kohler. For example, Claim 9 recites that "the cross section of said annular projection portion has a generally flat side opposite from said main body" and "generally flat sides radially adjacent to and symmetrical with said main body and said flat sides facing inwardly about the circumference of said gasket". In Kohler, the corresponding centering extensions 6 do not define a flat side along the length thereof.

Claims 10 and 11 further recite that the "predetermined angle is within a range of 10 degrees to 15 degrees relative to the radial direction". This range is not believed present in Kohler.

For the above reasons, reconsideration and allowance of Claims 1-11 is respectfully requested.

Further and favorable reconsideration is respectfully solicited.

Respectfully submitted,



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